



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,427	07/24/2006	Frank Blase	LIP071	4404

7590	10/02/2007
Steven J Grossman Grossman Tucker Perreault & Pfleger 55 South Commercial Street Manchester, NH 03101	

EXAMINER	
SINCLAIR, DAVID M	

ART UNIT	PAPER NUMBER
2809	

MAIL DATE	DELIVERY MODE
10/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,427

Applicant(s)

BLASE ET AL.

Examiner

David M. Sinclair

Art Unit

2809

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/07/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 4-17 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/20/2006 8/9/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claim 8, the phrase "possibly" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-14, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Holshausen (5,824,957).

In regards to claim 1,

Cable-routing device comprising links that are open at the ends (Fig 15-16 item 80), joined together in pivoting fashion and can be angled relative to each other in at least two directions, said links being arranged one behind the other in the longitudinal direction of the cable-routing device (Fig 18) and forming at least one guide channel (96 and 98) by means of guide elements (82) located radially outwards, where tensile force-absorbing pivoting joints are located between links

Art Unit: 2809

joined together in pivoting fashion within the cable-routing device and the links each display corresponding joint elements (ball and socket joints), characterized in that at least one pivoting joint is designed in such a way that, in order to form and/or disconnect the pivoting joint, the respective links and/or joint elements to be joined to one another and/or disconnected from one another can be joined and/or separated in a direction that encloses an angle relative to the longitudinal axis of the cable-routing device (one of ordinary skill in the art is able to see that the joints are connected and disconnected at an angle relative to the longitudinal axis as an angle relative to the longitudinal axis encompasses all angles to include 0° to 360°).

In regards to claim 2,

Cable-routing device according to Claim 1, characterized in that the joint elements of links joined together in pivoting fashion can be designed as a joint body, particularly a joint ball (92), and a joint body receptacle, particularly a ball socket (88).

In regards to claim 4,

Cable-routing device according to Claim 2, characterized in that the joint axes of one or both joint elements are transverse to the longitudinal axis of the cable-routing device (fig 18).

In regards to claim 5,

Cable-routing device according to Claim 1, characterized in that the joint elements are each supported by a support and the supports of the two joint elements of a link are offset relative to each other in a direction perpendicular to the longitudinal axis of the cable-routing device (seen in below figure).

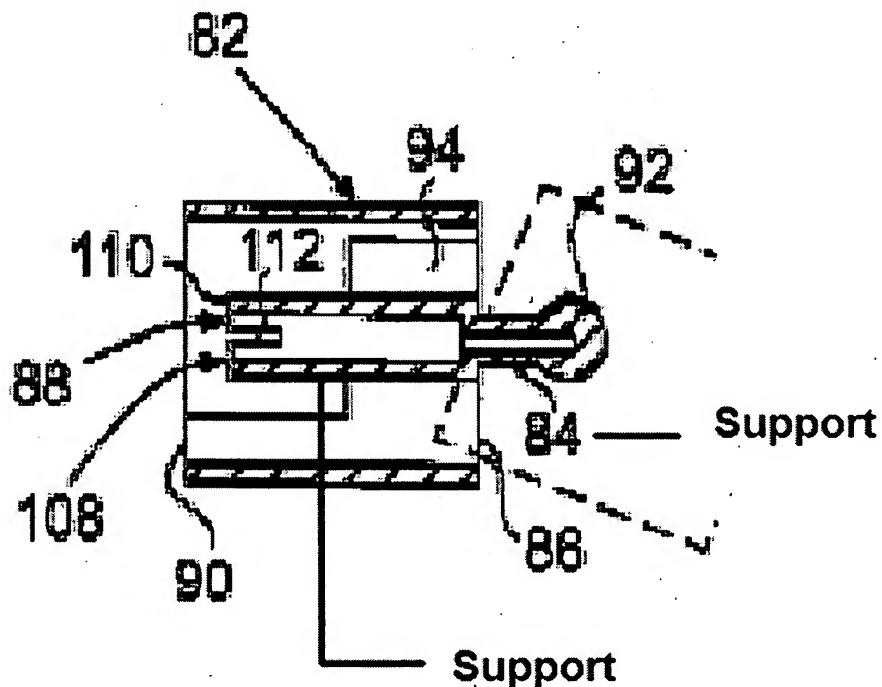


Fig 1: Altered version of Holshausen (957) – Fig. 18

In regards to claim 6,

Cable-routing device according to Claim 1, characterized in that the pivoting joint is a snap-in connection (claim 2).

In regards to claim 7,

Art Unit: 2809

Cable-routing device according to Claim 2, characterized in that at least one recess is provided adjacent to a receiving opening for the joint body in the joint body receptacle, extending in its longitudinal direction at least partially around the circumference of the receptacle (112).

In regards to claim 8,

Cable-routing device according to Claim 1, characterized in that links are provided that are provided with at least one brace (94), extending transverse to the longitudinal direction of the cable-routing device and possibly bearing a guide element, and in that the brace displays at least one opening (seen in below figure) extending in the longitudinal direction of the cable-routing device, which can optionally serve to accommodate a line or other device within the cable-routing device.

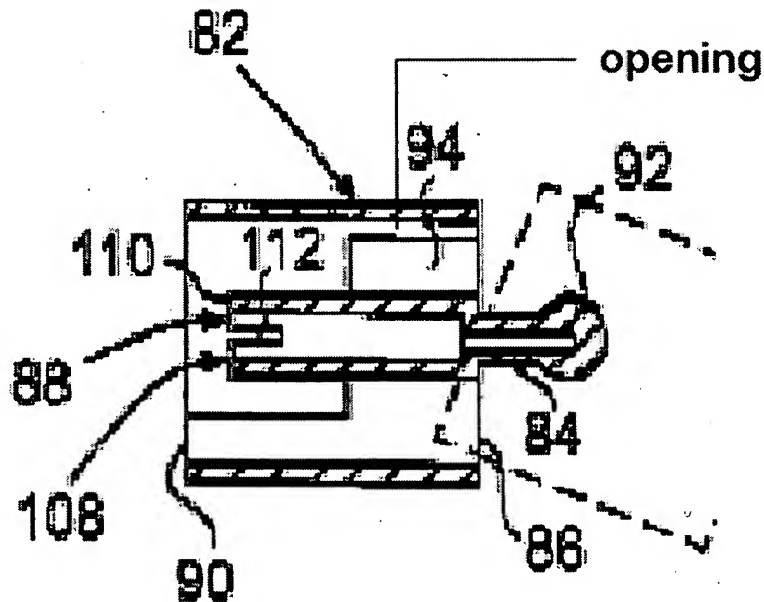


Fig 2: Altered version of Holshausen (957) – Fig. 18

In regards to claim 9,

Cable-routing device according to Claim 8, characterized in that the brace is designed as a base (Fig 16).

In regards to claim 10,

Cable-routing device according to Claim 1, characterized in that the links each display only one guide element, which extends at least around almost the entire circumference of the cable-routing device (82).

In regards to claim 11,

Art Unit: 2809

Cable-routing device according to Claim 2, characterized in that the joint body receptacle is provided with an opening (112), into which a tool for disassembling the joint body can be inserted.

In regards to claim 12,

Cable-routing device according to Claim 11, characterized in that the opening displays a shoulder (seen in below figure), a distance away from the inside of the joint body receptacle, against which a tool can be positioned in the manner of a lever.

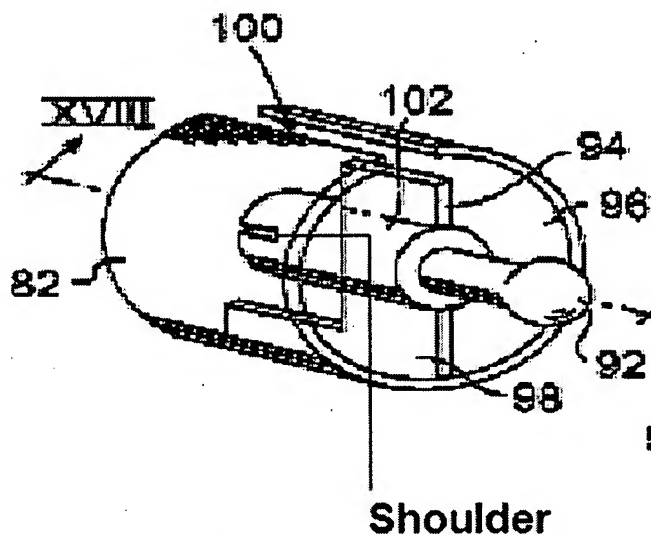


FIG. 16

Fig 3: Altered version of Holshausen (957) – Fig. 16

In regards to claim 13,

Art Unit: 2809

Cable-routing device according to Claim 1, characterized in that links are of one-piece design (element 80 is of unitary design – column 6 – line 42).

In regards to claim 14,

Cable-routing device according to Claim 1, characterized in that the links form a tubular section that is closed around the entire circumference (Fig 15-17), apart from at least one slit-type opening extending over the entire length of the link (100), where appropriate.

In regards to claim 16,

Cable-routing device according to Claim 1, characterized in that at least one, or all, of the pivoting joints can be disconnected independently of other pivoting joints, completely disconnecting the cable-routing device (allow for additional elements to be inserted into the chain at any point – column 7 lines 2-3).

One of ordinary skill in the art knows that if links are capable of being added to any point in the chain then links are also capable of being disconnected at any point in the chain.

In regards to claim 17,

Cable-routing device according to Claim 1, characterized in that at least one guide element of a link displays at least one, preferably closable, opening (100)

Art Unit: 2809

or predetermined breaking point for radially inward insertion of a tool into the cable-routing device for disconnecting at least one pivoting joint of the link.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable Holshausen (957) in view of Lockwood (6,042,155).

The references as applied above teach all the limitations except for the links display a rotationally symmetrical envelope and end areas, overlapping in the longitudinal direction of the cable-routing device, that are designed as spherical cap-like sections.

Lockwood (6,042,155) teaches links displaying a rotationally symmetrical envelope and end areas, overlapping in the longitudinal direction of the cable-routing device that are designed as spherical cap-like sections (Fig. 1-2).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to combine the teachings of Lockwood (155) with the teachings of Holshausen (957) to form a continuous conduit (containment device) for carrying wires as taught by Lockwood (155) (column 2 – line 13).

Allowable Subject Matter

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blase (6,427,980) teaches a cable guide comprising a plurality of guide links that are capable of pivoting relative to one another (abstract). Blase (980) further teaches the guide absorbing the tensile force acting in the longitudinal direction (abstract). Blase (980) teaches the tensile force-absorbing elements may be designed as snap elements (column 2 – 1st paragraph). Blase (980) further teaches in order to disconnect adjacent guide links in the region of the tensile force absorbing elements, the guide links can be designed to pivot about an axis parallel to the pivoting axis (column 3 – 4th paragraph)

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Sinclair whose telephone number is (571) 270-5068. The examiner can normally be reached on Mon - Fri 7:30-5, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES D. GARBEN can be reached on (571) 272-2194. The fax phone

Art Unit: 2809

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DMS



CHARLES D. GARBER
SUPERVISORY PATENT EXAMINER